

# Income and expenditure of households in Romania<sup>1</sup>

Prof. Laura Cismaş Ph.D.  
West University of Timisoara  
The Faculty of Economic and Business Administration  
Timişoara, România  
Assist. Andra Miculescu Ph.D. Student  
West University of Timisoara  
The Faculty of Economic and Business Administration  
Timişoara, România  
Assist. Maria Oţil Ph.D.  
West University of Timisoara  
The Faculty of Economic and Business Administration  
Timişoara, România

**Abstract:** Consumers act in housing in a way that disposable income is allocated to current consumption or for savings and future consumer needs. In many countries, household consumption is studied by analyzing family budgets. Household income is the main source of cover for public need of consumption. In this paper we analyzed the level, dynamics and structure of income and consumption expenditure of households in Romania during 2001-2008.

JEL classification: D11, D12, D13

**Keywords:** income, expenditure, income inequality, family budgets, consumption

## 1. INTRODUCTION

In terms of their structure, the population's income includes : cash income from various sources (salaries, income from freelance work, sales, unemployment benefits, pensions, child allowances, scholarships and other welfare benefits, property income, etc.); free or discounted price value of benefits (goods and services) ; value of food and non-food consumption from own resources.

Inequality of income distribution is reflected in the percentage of revenue across different segments of the population, ordered by income level. Using the population quintile distribution, we achieve the following[2]:

The percentage of total income of the population given to 20% of the poorest people;

The percentage of total income of the population given to 20% of the richest people

Unevenness of income distribution is calculated as the ratio between the income available (including or excluding the value of consumption from own resources) obtained by all persons in quintile V (the richest), compared to the income earned by people in quintile I (the poorest). Gini coefficient is the one which provides an overall measure of the degree of inequality of income distribution. It measures the degree to which income distribution deviates from a perfectly equal distribution.

---

<sup>1</sup> This paper is elaborated under the framework of Doesec Project SOPHRD /88/1.5/S/55287;

Total expenditure of households expresses the use of revenues, which are intended for consumption or for household savings of the population. Total expenditures include: money spending, regardless of destination (consumption, taxes and binding payments, birds and animals acquisitions, buildings and land, other investment costs, etc..), including the value of benefits (goods and services) free or reduced price, evaluated at the sale price of the bidding part; the value of food and non-food consumption from own resources determined from the monthly average prices of those products.

The main purpose of the consumption expenditure of households are food or non-food supply, services and transfers to public and private administration and to the social security budgets in the form of taxes, levies, contributions and coverage of domestic production related needs. Another component of household expenditure is an expenditure incurred for the portion of food and drink purchased for consumption, which are not consumed in the reference period, which remain in stock, are being processed or are processed as animal feed[1].

Correlations between rising incomes and increasing consumer spending were analyzed by economist-statistician E. Engel. Where the standard of living of the consumers is low, first they satisfy the most urgent needs of living: food, clothing and home.

Rising living standards is reflected primarily on the goods that are not essential, such as leisure, transport, vacations. The existence of a hierarchy of needs is highlighted with reference to Engel's law, which shows the dynamic relationship between public revenues and expenditure for the consumption of food supplies in order to reduce the weights with increasing income.

Research conducted on the basis of family budgets in developed countries have shown the following trends regarding the relationship between the evolution of revenues and the development of consumer spending revenues:

- the share of expenditure for food in family budgets was reduced by over 40% to about 20%, in the context of diversification and improvement of consumption goods;

- the share costs with clothing, footwear and accessories decreased from approximately 20% to less than 10%;

- the share costs with services, including those with home and comfort, increased in the case of costs for transport and communications, to around 17%.

## **2. DYNAMICS AND STRUCTURE OF HOUSEHOLD INCOMES**

Dynamics and structure of total income of households in Romania between 2001 and 2008 is presented in Table. 1

During 2001-2008, total household income structure is distinguished by the large share of cash income which continues to grow (from 74.4% in 2001 to 83.1% in 2008). This increase in revenue is due monetary developments from one year to another, as well as to the incomes from social benefits.

Revenues in nature have had a relatively small contribution to the formation of total revenues compared to cash incomes. The categories of income that rose media in case of revenues in nature are represented by revenue from agricultural products from own resources, but are in a continuous decrease. Income in nature recorded in the same period a decreasing trend, reaching in 2008 to 16.9% on account of the equivalent consumption of food from own resources. Also noted that the consumer price index is lower than the index of total revenue, which means the actual growth of the total revenue

**Table no. 1 Dynamics and structure of household incomes**

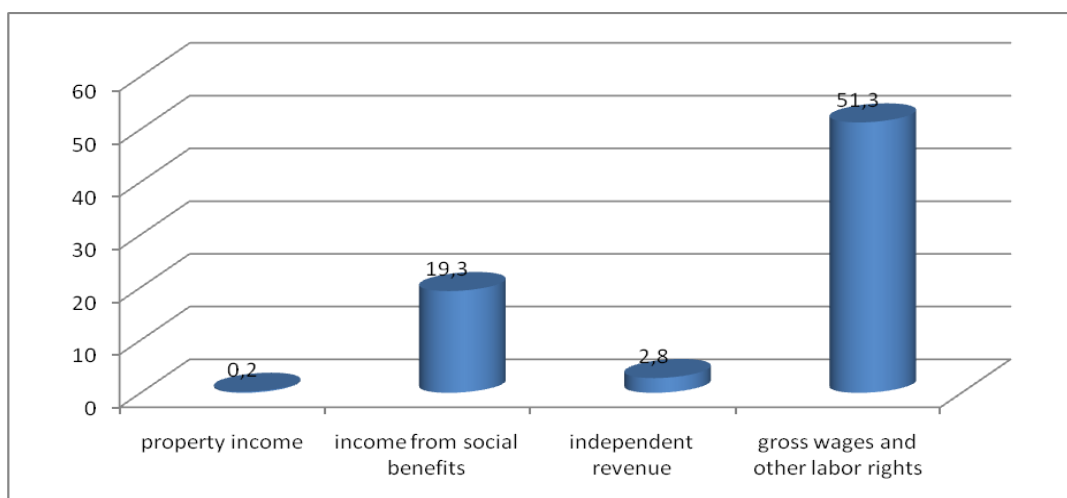
Year	2001	2002	2003	2004	2005	2006	2007	2008
Total income (m.u in lei/month/household)	521,79	658,51	795,09	1085,79	1212,2	1386,3	1686,7	2131,7
Index of total income % (100 = previous year)	100	126,2	115,27	143,03	111,64	114,36	121,66	126,38
Consumer price index (IPC) %	134,50	122,50	115,30	111,9	109,1	106,56	104,84	107,85
Cash income %	74,4	76,2	74,9	75,8	79,6	80,7	81,1	83,1
The value of the income in nature received by employees and by recipients of social benefits %	0,9	1,1	1,7	2,4	3,1	3,3	3,1	3,1
The value of the consumption of agricultural products from own resources %	24,7	22,7	23,4	21,8	17,3	16,0	15,8	13,8

Source: calculations based on data from \*\*\* Romanian Statistical Yearbook 2008, \*\*\* Romania in cifre 2009, [www.insse.ro](http://www.insse.ro);

Although declining, the consumption's value of agricultural products from own resources has a large contribution to total household income formation, of over 13%. It is clear that agricultural production of rural households is devoted mostly to meet the consumption needs of households, which is a way for the capitalization of two available resources - land and labor - and to cover cash shortages which affects the rural households. In the 1990s, agricultural production carried out by many rural households for own consumption was one of the ways to cope plummeting revenues under the loss of jobs in industry (evidence being even the increase of the flow of migration from urban to rural areas), and a source of transfers in nature between households, as a form of solidarity within the extended family.

The structure of the population revenues depends on environmental income and residence status of the household head. For families of employees, wages hold the largest share of the total revenues, while in a peasant family, self-consumption prevails[6].

The most important source of income is the salary earnings (Fig. 1.), which have a share of 51.3% of total revenue. Employment in employment activities is the most common form of public employment and wage level is higher compared to other income enjoyed by a large number of people (pensions, mainly). The income from social benefits is situated on the next place, with a share of 19.8%. The relatively high proportion of the contribution of this source at creating the revenues arises from the complexity of the social protection system and especially from the large number of beneficiaries.



Source: calculations based on data from \*\*\* Romanian Statistical Yearbook 2008

**Fig. 1. Share of cash income in the total income**

Cash income from agriculture have a low contribution, of 2.8%, to the formation of households revenues. It is a result of low efficiency of small farms, most of their production being used for own consumption. Revenues from property income are those categories that had an almost negligible influence on the formation of monetary income.

From the Member States of the European Union we notice that Romania is on the penultimate place in terms of gross and net average earnings, exceeding only Bulgaria. They are three to six times smaller than the old EU countries (EU 15) and one to two times smaller than those of new EU countries. (Table no. 2)

**Table no. 2 Earnings in the Member States of the European Union in 2007**

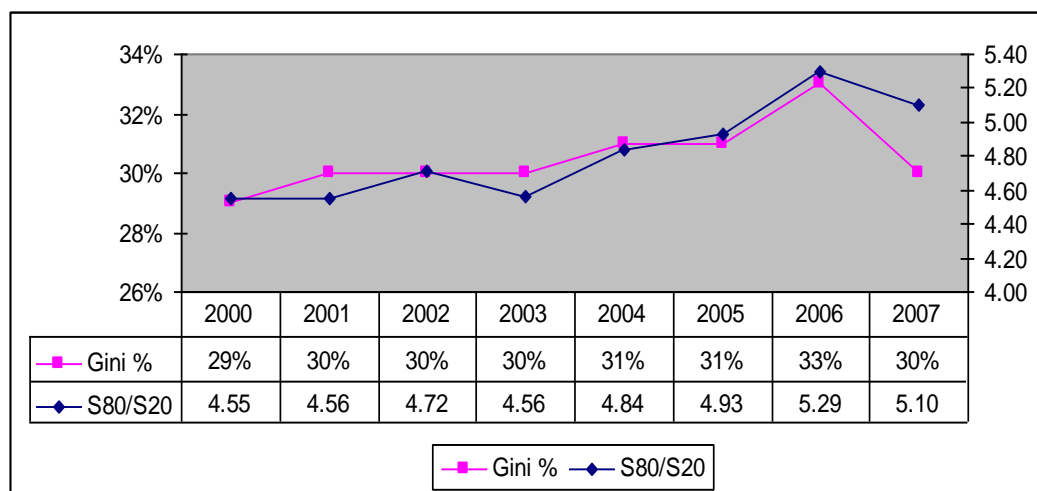
	Euro/year/employee		% from EU 27		% from EU 15	
	Gross earnings	Net earnings	Gross earnings	Net earnings	Gross earnings	Net earnings
EU-27	29740	20208	100	100		
EU-15	35244	23883			100	100
United Kingdom	48463	35377	162.96	175.06	137.51	148.13
Denmark	46166	27242	155.23	134.81	130.99	114.06
Luxembourg	45350	32152	152.49	159.11	128.67	134.62
Germany	42949	24551	144.41	121.49	121.86	102.80
Netherlands	39400	25438	132.48	125.88	111.79	106.51
Belgium	38681	22447	130.06	111.08	109.75	93.99
Austria	37644	25016	126.58	123.79	106.81	104.74
Sweden	36477	26395	122.65	130.62	103.50	110.52
Finland	34837	24339	117.14	120.44	98.85	101.91
France	32243	23280	108.42	115.20	91.49	97.48
Ireland	31336	26973	105.37	133.48	88.91	112.94
Greece	24380	18020	81.98	89.17	69.17	75.45
Italy	23990	17152	80.67	84.88	68.07	71.82
Spain	21721	17280	73.04	85.51	61.63	72.35
Portugal	15682	12147	52.73	60.11	44.50	50.86

Slovenia	...	...				
Cyprus	22337	20434	75.11	101.12	63.38	85.56
Malta	15535	12770	52.24	63.19	44.08	53.47
Czech Republic	9013	6952	30.31	34.40	25.57	29.11
Estonia	8694	6942	29.23	34.35	24.67	29.07
Hungary	8489	5207	28.54	25.77	24.09	21.80
Poland	8196	5644	27.56	27.93	23.26	23.63
Slovakia	7229	5609	24.31	27.76	20.51	23.49
Latvia	6690	4781	22.49	23.66	18.98	20.02
Lithuania	6334	4734	21.30	23.43	17.97	19.82
Romania	4825	3485	16.22	17.25	13.69	14.59
Bulgaria	2594	2048	8.72	10.13	7.36	8.58

Source: own calculations based on data from \*\*\*, Eurostat, Data navigation tree / Population and social conditions / Labor market / Earnings / Net earnings and tax rates, <http://epp.eurostat.ec.europa.eu>;

The gap between revenues is determined by the gap between labor productivity and employment differences, in terms of level and structure, and mainly by the share of employees in employment.

The dynamics of income inequality indicators in Romania are presented in Figure 2. From figure 2 we can observe that the population's income inequality in Romania increased during 2001-2006 and in 2007 saw a significant drop from 2006. The increase in inequality took place amid rising incomes due to faster growth of bigger revenues than of the smaller ones.



Source: calculations based on data from \*\*\*, Indicatori de dezvoltare durabilă, [www.insse.ro](http://www.insse.ro);

**Fig. 2 Dynamics of income inequality in Romania**

The amount of revenue available to the richest population was 4.55 times higher in 2000 than the incomes of the poorest quintile, amounting in 2006 to be approximately 5.3 times and the Gini index ranged from 29% and 33%.

### 3. DYNAMICS AND STRUCTURE OF HOUSEHOLD EXPENDITURE

From Table No. 3, we can observe that in the early years of the analysis, the total household expenditure lies at the same level with the total revenue (over 98% of total income), and since 2004 their share in household income recorded a downward trend.

**Table no. 3 Total expenditure and consumption expenditure pattern of households**

Year	2001	2002	2003	2004	2005	2006	2007	2008
Total expenditure	516,52	651,66	781,45	1049,94	1149,33	1304,66	1541,96	-
The share of total expenditure in total income (%)	98.99	98.95	98.28	96.69	94.81	94.11	91.42	-
Index of total expenditure % (100 = previous year)	100	126,16	119,91	134,36	109,47	113,51	118,19	-
Total consumption expenditure lei/month/ household	376,51	474,47	566,87	752,00	863,89	962,50	1104,70	1365,36
Consumption expenditures index % (100 = previous year)	100	126.00	119.47	132.66	114.87	111.41	114.77	123.59
Share of consumer expenditure in total expenditure (%)	72,89	72,81	72,54	71,62	75,16	73,77	71,64	-
The structure of consumption expenditure								
Food products and soft drinks	52,2	49,9	48,6	46,4	44,2	42,3	41,7	40,9
Alcoholic beverages, tobacco	6,0	5,9	6,3	5,9	5,8	6,0	6,5	6,5
Clothing and Footwear	5,9	6,1	6,1	6,3	6,2	6,2	6,8	6,7
Housing and endowment of goods	16,4	17,8	18,3	18,5	19,4	20,4	20,1	20,4
Health	2,7	2,8	3,0	3,6	3,8	4,1	3,9	4,1
Transport and communications	9,2	9,6	9,4	10,6	11,4	11,6	11,0	11,1
Recreation, culture, education	4,4	4,5	4,6	4,8	5,1	5,2	5,4	5,3
Other expenditure	3,2	3,4	3,7	3,9	4,1	4,2	4,6	5,0

Source: calculations based on data from \*\*\*, Romanian Statistical Yearbook 2008; \*\*\*, Romania in cifre 2009; [www.insse.ro](http://www.insse.ro)

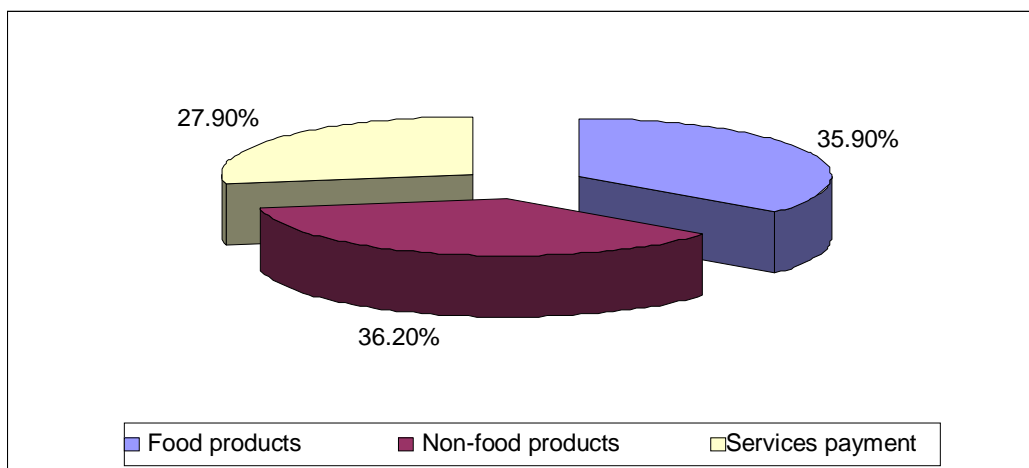
The main destination of household expenditure is consumption, which averaged over all households has more than 70% of total expenditure. The structure of household consumption is determined by calculating the share of each group of goods and services in the total consumption expenditure of the population. Consumption structure and in particular, the share of food expenditure in total consumption, are important indicators for estimating the state of poverty.

Surprising trends represents an element of interest that manifests itself in the current period in terms of food consumption. Consumer desires, preferences and expectations are complex and diverse, from this resulting the need for a proper analysis of consumption in the context of agri-food system.

Analysis of the evolution over time of people's consumption structure highlights some trends and laws, outlined since 1857 by statistician Ernst Engel. Satisfying the population needs requires a hierarchy. The needs of consumption of primary importance in terms of physiological needs (food, clothing, housing) have a special priority. Gradually, with increasing the population's income, people get to meet consumption in an optimal physiological level, so the extra revenue goes to convenience goods and services. In other words, the large share of consumption in a family budget reflects a lower standard of living, while with increasing income increases the share of consumer spending on services.

Increasing the share of food expenditures in economically underdeveloped countries is not due to the fact that people are eating more, but due to a decrease ratio of disposable income and price, in other words due to the decrease of real wages. The dynamics of household expenditure and the structure of consumption expenditure in Romania during 2001 -2008 are presented in Table 3.

During 2001-2008, food and soft drinks represented a high proportion in the total consumption expenditure. However, they show a downward trend if they are associated with increased housing costs, endowment and its maintenance (from 16.4% in 2001 to 20.4% in 2008), and with those for health (2, 7% in 2001 to 4.1% in 2008). It also can be noticed that although the share of expenditure for food in Romania is high, it has decreased in the period under review. This is due to people's real income growth.



*Source: Graphic developed based on data from Eurostat;*

**Fig. 3 The structure of monetary consumption expenditure in 2008 - all household-**

In 2008, spending money for food, held a share of 35.9% of the total monetary consumption expenditure, over the households (Fig. no. 3). On average, for the total of farms, the share of costs for non-food goods was 36.2%, and expenditures for services registered a 27.9% share. High share of food expenditures can be explained by the low standard of living of the majority population, or by the faster increase of the food prices than for other consumer goods.

According to the National Institute of Statistics, the population's share of consuming expenditure grew in 2009, reaching 72.5% in the third quarter. This increase was due to reduction of total household expenditure. The biggest share belongs to foods and soft drinks, which accounted for 40.7% of household consumption in the third quarter, up from 41.9% in the second quarter and 40.8% in the first. In the July-September period, expenditure on housing maintenance held a share of 19.4% from the consuming expenditure. Health and education expenditure held the lowest weight (4.5% and 0.7%) because these services are available in the social insurance system or they are free.

#### 4. CONCLUSIONS

Household income in Romania is characterized by a generally low level, the average disposable income accounts for less than one fourth of the average household incomes in the old EU Member States (EU-15).

Most of the revenues are used to cover basic needs, food consumption expenditure ratio exceeding 40% of total consumption expenditure.

Household income formation is characterized by the relatively low contribution of wages, which provides only half of the total revenue and also by the very low contribution of cash incomes from agriculture, given that farmers are one quarter of employment.

The degree of income inequality in Romania is high. The amount of revenue of the richest 20% of people in Romania is over five times bigger than the amount of revenue of the poorest 20% of the people.

The main destination of household expenditure is consumption, which averaged over all households, has more than 70% of total expenditure. The share of expenditure for food consumption in Romania is high, over 40%. This can be explained by the low standard of living of the majority population, but due to increasing real incomes of the population, it registered a downward trend in the period under review.

#### REFERENCES

1. Cismaș, Laura Consumul în teoria economică, Editura Mirton, Timișoara, 2004
2. Secăreanu, C. Starea economiei naționale. Evaluare, analiză, comparații internaționale”, Editura Economică, București, 2000
3. \*\*\* Eurostat, Data navigation tree / Population and social conditions / Labor market / Earnings / Net earnings and tax rates, <http://epp.eurostat.ec.europa.eu>
4. \*\*\* Indicatori de dezvoltare durabilă, [www.insse.ro](http://www.insse.ro)
5. \*\*\* Riscuri și inechități sociale în România, Administrația Prezidențială, Comisia Prezidențială Pentru Analiza Riscurilor Sociale și Demografice, septembrie, 2009
6. \*\*\* Romanian Statistical Yearbook 2004 - 2008
7. \*\*\* România în cifre 2009, [www.insse.ro](http://www.insse.ro)
8. \*\*\* România: Raport de evaluare a sărăciei, Programul de asistență analitică și consiliere, Noiembrie 2007